

Remarks

The present invention is a communication unit, a method for inputting of data to a communication unit provided with a keypad wherein individual keys of said keypad are changeable and a method for transferring an input from a first communication unit to a second communication unit.

The Examiner's indication of the allowance of claims 12-15 is noted with appreciation. Submitted herewith are editorial amendments which have been made to claims 12-15 to improve their form for issuance as a patent.

Claims 2-5 and 9-12 stand rejected under 35 USC §112, second paragraph, as being indefinite regarding insufficient antecedent basis. These claims have been amended to overcome the stated grounds of rejection.

Claims 4, 5 and 11 stand rejected under 35 USC §112, first paragraph, as allegedly not being enabled. These grounds of rejection are traversed for the following reasons.

The Examiner indicates that the Specification does not clearly explain what is an output device and how this interchangeable element is included in said output device with the Examiner referring to column 7, line 13, to column 8, line 5. The Examiner should note that the device that is being referred to herein is a cellular telephone as depicted in Figs. 1 and 3. It is well known that the user interface is comprised of a series of devices such as the screen 1, keypad 7, menu selection keys 9, and handling keys 12 as depicted in Fig. 1. The four-way scroller 13 disclosed in Fig. 3 provides for variable functionality which involves both the input of information and the output of information. It should be noted that the specification teaches *inter alia* that the interchangeable elements may be piezo-electric elements as described in column 8, lines 26-29. Piezo-electric elements have the capability

of reacting to an electrical signal to expand and further upon the application of pressure to produce electrical output signals.

Therefore, it is seen that the controller 18 depicted in Fig. 2, which provides digital control of the total functionality of the communication device including the input and output, may be used to provide electrical signals to the interchangeable elements as described in column 7, lines 13-18, "to enable flexible input and output of data from the communication unit." It is submitted that the combination of electrically controllable elements in the form of piezo-electric elements and further the disclosure of a controller 18 as controlling the overall device in combination with the aforementioned disclosure in page 7, lines 13-18, enables a person of ordinary skill in the art to practice the claimed subject matter of claims 4, 5 and 11 which substantively recite the controller modulating the interchangeable elements, which are disclosed as piezo-electric elements, to produce an output in response to an electrical signal provided under the control of the controller causing an expansion thereof. A person of ordinary skill in the art understands that such an expansion is within the scope of the claimed output.

Claims 1, 4-8, 11, 16 and 17 stand rejected under 35 USC §102 as being anticipated by USP 6,700,508. These grounds are traversed for the following reasons.

Claims 1 and 16 recite as follows:

1. (Currently Amended) A communication unit including a digital control with associated random access and read only memory for control of said communication unit, including intra-changeable elements controlled by said processor, and where said elements are used in the user interface of said communication unit.

16. (Currently Amended) A communication device having a user interface, the device comprising:
a receiver for receiving a control signal;
a changeable element controlled by a digital controller with associated random access and read only memories and responsive to the received signal to change characteristics of the element, wherein the changeable element forms part of the user interface and wherein the changeable element changes characteristics in response to the control signal thereby providing a sensory message to a user.

Each of claims 1 and 16 substantively recites a communication device including changeable or intra-changeable elements controlled by a processor which is a digital controller with associated random access and read only memories as described in the Specification in association with Figs. 2 and 3 with the changeable or intra-changeable elements being used in the user interface of the communication unit as recited in claim 1 and as more specifically recited in claim 16 wherein the changeable element is recited as changing characteristics in response to the control signal thereby providing a sensory message to a user.

Nomura et al, on the other hand, discloses a thin keyboard which utilizes a piezo-electric control circuit 10 to drive a piezo-electric element. The piezo-electric control circuit of Fig. 2 is not readable upon and is not part of a communication unit including a digital controller with associated random access and read only memories with changeable or intra-changeable elements being controlled by the digital controller. What Nomura et al discloses is that a plurality of piezo-electric elements in a base plate are driven by a piezo-electric control circuit. These elements and control circuits are not and would not be considered by a person of ordinary skill in the art to be a digital controller with associated random access and read only memories for controlling the communication unit with the changeable or intra-changeable elements controlled by the digital controller used in the user interface of the communication unit.

A keyboard does not contain a processor which corresponds to the digital controller with associated random access and read only memories as recited in claims 1 and 16. Moreover, a person of ordinary skill in the art would not even consider making such a modification to Nomura et al to arrive at the subject matter of claims 1 and 16.

Dependent claims 4-8 and 11 recite more specific aspects of the present invention which are not anticipated by Nomura et al. Claims 4 and 5 recite, *inter alia*, that the intra-changeable elements are included in both an input and an output. It is submitted that a person of ordinary skill in the art would not consider the keyboard unit of Nomura, in which the piezo-electric control circuit provides enhancement of the click touch for purposes of producing an enhanced tactile sensation to be an input/output device as recited in claim 1. See column 4, lines 1-29 of Nomura et al. Moreover, claims 6 and 8 recite respectively that the intra-changeable elements are compressible and expandable and the interchangeable elements are made of elasto resistive materials. It is submitted that this subject matter is not disclosed by Nomura et al.

The Examiner cites column 2, lines 42-47, regarding claim 6. However, it is submitted that the referenced portion does not disclose that the piezo-electric item is compressible. The Examiner cites column 3, lines 37-41 for the keyboard being elasto resistive. However, it is submitted that column 3, lines 37-41 do not disclose this subject matter. Claim 11 further recites that the input and output device is a cover part of the communication unit. As stated above with respect to claims 4 and 5, it is submitted that Nomura et al does not disclose that the intra-changeable elements are input output devices.

Claim 17 is patentable for the same reasons set forth with respect to claim 16.

The Examiner's indication of claims 2, 3, 9, 10, 18 and 19 containing patentable subject matter is noted with appreciation.

In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR §1.136. Please charge any shortage in the fees due in connection with the filing of this paper, to the Deposit Account of Antonelli, Terry, Stout & Kraus, LLP, Dep. Acct. No. 01-2135 (1030.40825X00), and please credit any excess fees to such deposit account.

Respectfully submitted,
ANTONELLI, TERRY, STOUT & KRAUS, LLP



Donald E. Stout
Reg. No. 26,422

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